DOCUMENT RESUME

ED 044 766 EA 003 097

AUTHOR	Wight, Albert R.
TITLE	Participative Education and the Inevitable Revolution.
INSTITUTION	Center for Research and Education, Estes Park, Colo.
PUB DATE	70
NOTE	52p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$2.70
DESCRIPTORS	Child Responsibility, *Creativity, Educational Objectives, Independent Study, Individual Development, *Individual Instruction, Individualized Instruction, *Individual Needs, *Self Actualization, *Student Participation

ABSTRACT

Participative education could provide impetus and direction to the educational revolution that has been brewing for some time. This approach, based on student involvement and participation, would meet the needs of students and teachers, both of whom are searching for alternatives to traditional education. Emphasizing self-responsibility, participative education attempts to involve the student in experiences relevant to his future, and to provide him with the opportunity and methodology for learning from these experiences. Students would be allowed to develop self-reliance, self-confidence, and increased self-esteem, and would leave school better equipped for lifelong, continued learning. (Author/LLR)

ED 044766

PARTICIPATIVE EDUCATION

AND THE INEVITABLE REVOLUTION

by
Albert R. Wight, Ph.D.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

© 1970
Center for Research and Education
Estes Park, Colorado (USA)

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Albert R. Wight
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

EA 003 097

This material may not be reproduced in whole or in part
without written permission from the author or the Executive
Director, Center for Research and Education, P. O. Box 1768,
Estes Park, Colorado 80517

PARTICIPATIVE EDUCATION
AND THE INEVITABLE REVOLUTION

Albert R. Wight*

Who could doubt that we are in the midst of a revolution in education, when every day we read about the strife on college and high school campuses, student demands for relevance and involvement, the inequities in education (a system favoring the middle-class, white student), and the failure of the traditional academic system to prepare students for today's world? Educators the world over are saying that the system must change, from one that indoctrinates the student in the ways of the past, to one that prepares him for the rapid changes of the future.

With buildings and libraries being destroyed and students being killed, the need for change takes on a new urgency. There is a growing fear that change will come too late to avoid widespread destruction of life and property. Events are bearing out the words of Arthur W. Chickering who said in 1969 (p. 337) that "ultimately there is really no question whether change will come, and if peaceful evolution is impossible, violent revolution becomes inevitable."

Change in education should not have to be brought about by fear. Educators should not have to be coerced into assuming the responsibility for reappraising the needs and goals of education and making the necessary changes. Nothing could be more important at this point in time than to identify the direction the revolution is taking and the steps necessary to help make it a peaceful, orderly and constructive process. The hope for the future of mankind lies in education, but not in education as we know it today.

What man will become is largely determined by culture and society, yet culture and society are formed by man collectively. This cycle is difficult to break, but it must be broken, because it is taking us along a path toward self-destruction, and possibly the destruction of all life on earth. The kinds of changes required cannot be legislated, dictated, or enforced. They can only be achieved through education.

There is no need to enumerate the multitude of problems facing mankind. Our young people are well aware of the awesome responsibilities

---

*Dr. Wight is currently Associate Director for Education and Training at the Center for Research and Education, Estes Park, Colorado. He completed his Ph.D. in psychology at the University of Utah under Calvin W. Taylor, noted researcher in the field of creativity.

being passed on to them. Part of their interest is due to the recognition that our present educational system is contributing to problems more than it is preparing students to solve them.

The Need for Change

According to Neil Sullivan (1969), "The nation is finally aware that the public schools are doing a dismal job of preparing millions of young people--particularly minority students--for life generally, for success in business or industry, or for entrance as students in our institutions of higher learning." He and many other educators are saying that sweeping curriculum changes are needed now, the content of curriculum must be made relevant to the needs of today's students, and our methods of teaching must be drastically altered.

Carl Rogers (1967) stated that our educational system "cannot afford to develop citizens who are passive, whose knowledge is settled and closed, whose ways of thinking are rigid, who have no feeling for the process of discovering new knowledge and new answers." Julius Stulman (1968, p. 15) felt strongly enough about the inadequacies of the present system to say that, "Any educational program based on the old traditional methods, with their antiquated concepts, would be miseducation. . . . It is conceivable that the methods used in teaching today are not only completely inadequate, but actually injurious." His "conceivable" should be changed to "most probable" if we agree with John Holt (1969), who is of the opinion that "most schools, in spite of their good intentions, do untold harm to most children." The Library of Contemporary Education review of Eleanor Burke Leacock's Teaching and Learning in City Schools reported that: "a tragic picture emerges--one studded with vivid scraps of dialogue between teachers and pupils--of how classroom practice too often produces in too many children a quiet, day-to-day erosion of hope and self-respect."

And what are those like who manage to remain in this system as students for sixteen years? Chickering (1969, p. 285) cites several studies showing that "those who persist longest in college--compared with their peers who leave or who interrupt their education--are more authoritarian, more rigid, less creative, less complex." He added that "numerous studies of attrition show that the most creative and complex are the ones who leave."

The Traditional Classroom

And why do they leave? They get tired of seeing the teacher in the center of the stage, deciding, directing, controlling, manipulating, entertaining, evaluating, punishing, and coercing, while they sit passively doing as they are told. Although the teacher is usually convinced that what he does is good for the student, his lectures and demonstrations are given more to meet his needs than those of the student. Little or no consideration is given to the interests of the student, who is expected

to conform to the wishes or demands of the teacher. The teacher may ask for active involvement--thinking, questioning, problem solving, evaluating, creating--but his actions, the methods he uses, and the rewards of the system are for passive activities. Listening and accepting without questioning are stressed more than thinking, memorization more than problem solving, and conformity is valued over creativity.

In most traditional classrooms, too much of the responsibility for the educational process is retained by the teacher, who determines the goals, decides and presents the content to be learned, tests for recall and understanding, identifies problems to be solved (usually problems with only one solution rather than real-life problems with many possible solutions), specifies the approach to be followed in solution, and evaluates the student's performance against his (not the student's) standards and criteria. The student is included very little in these activities and cannot, therefore, feel much responsibility for them.

Traditional teaching methods, most of which are centered around the lecture approach, do not promote the kind of involvement and responsibility needed. The chief value of a lecture is in information transmission (and an inefficient means of achieving this objective) or in the interest, excitement, and stimulation that can be generated by an enthusiastic instructor. But such instructors are rare, and even a series of good lectures can become boring. The students are still required to be passive, always at the receiving end of the learning process, never the initiators. They do not assume responsibility for their own learning, and are not involved in evaluating what has been learned. It is no wonder, then, that the typical student's goals are to psych out the instructor, meet the requirements of the system, obtain passing grades, and graduate. After graduation he may find some freedom for self-expression and self-determination if he has not become hopelessly addicted to mediocrity and conformity.

Educators often complain about the lack of motivation, initiative, responsibility, vision, interest beyond assigned tasks, and imagination in their students, but they are only dimly aware of the fact that they, with their methods and attitudes, are creating and perpetuating this condition. Students weren't born this way. The teacher tries to pass some of his enthusiasm on to the student (if he himself has any left), tries to inspire a love of learning. But the rewards remain largely in the grades, achieved by submitting to the demands of a system defined and developed by someone other than the student. The student sees little opportunity for self-expression or creativity. It is no wonder that he is often rebellious and irresponsible, that his creativity is directed into unproductive or destructive channels. If he does not drop out, his goals then become to tolerate and beat the system or to achieve the rewards available through submission and conformity.

A student who manages to survive and succeed in the traditional system is poorly prepared to enter the real world in which he has to be able

to actively learn on his own, to think, and to solve problems. The adjustment is often difficult to make, and requires considerable time. Employers blame the educators, educators blame the parents. Everyone blames the student.

I do not mean to single out the teacher. Very often it is the administrators over the teacher who decide what is to be learned and how it is to be taught. The teacher who attempts something new or innovative is too often squelched, forced to conform, or kicked out. Emphasis is on following the course as it is prescribed and keeping the students quiet and under control.

What was said for the traditional teacher applies equally well to most college and university instructors, if not more so. They receive no instruction or guidance in curriculum design or teaching methodology (which may be good, in view of what is offered in these areas in most colleges of education today), and, thus, continue to do what was done to them. Particularly after they obtain tenure, they are free to do whatever they wish in the classroom, perpetrating on a captive audience the same deadening series of lectures year after year after year. It is no wonder that they resist anything that might affect the status quo.

It is understandable that a great many educators find these criticisms inconceivable and highly threatening. What they are being told is that what they believe in, what they have been doing very effectively for years, is inhibiting the development of the student, stifling his creativity, stultifying his imagination, and denying him the opportunity to learn responsibility, to become involved, to express himself, and to experience a sense of fulfillment and self-worth. But this is why the creative and complex drop out, often bewildered and confused by the conflict between the demands of the system and their own needs.

The Failures and Academic Standards

But the creative and complex are not the only ones who leave. In our traditional system, with its emphasis on academic achievement, education becomes a selection tool, to select out those who have difficulty achieving in this narrowly and arbitrarily prescribed sphere of activity. It is only those who can achieve and maintain the standards of the schools who are allowed to succeed, and reap the rewards of society.

The objective of far too many schools, particularly universities, is to maintain so-called standards of excellence--excellence arbitrarily defined as achievement on academic tests measuring recall of facts and principles transmitted through lectures and assigned reading. It is the student who must conform and meet the "standards of excellence," or drop by the wayside, if not before he reaches the university, then soon after. The system is interested in him as an individual only to the extent that he succeeds within the system. If he cannot succeed, it is said that he obviously does not belong and is no longer the school's responsibility.

But even if achievement on academic tests of ability to absorb and recall information or facts (selected and transmitted by the teacher) were the best criterion of success in life and worth as an individual (which is absurd, in spite of the fact that this assumption affects the lives of untold millions of people), we can no longer afford to ignore our responsibility to those who do not succeed. We must listen to Neil Sullivan (1969), who said that "schools simply can no longer fail and hide their failure. The consequences of continued failure could well be destruction of society itself, as millions of our citizens refuse to accept the role to which they are consigned in society by failure in school."

The educator can no longer refuse to accept the responsibility for his product, the failures as well as the successes. Those who fail cannot help but lose self-esteem and self-confidence. They have been proven inferior in those abilities valued most highly in our society, and often, as a result, resent and reject that society. But many if not most of those who succeed may also come to view themselves as inferior because they were not at the top. With the emphasis on competition in the classroom, and grading on a curve, failure is ensured. It is only a very small group at the top who really succeed. Those who are not at the top see themselves as failures in many respects, as average at best (and who wants to be average?), or as marginal successes, not really equipped to achieve in a competitive world that places so much emphasis on intellectual abilities. And the very few at the top are often unbearable intellectual snobs, interpersonal failures, and emotional cripples.

Rather than a system that places emphasis on academic standards and intellectual abilities, we need a system designed to develop the whole person, the full range of potentialities of each individual student. Rather than competing with one another for grades in a lock-step system, students should be working together to explore, identify, and develop their individual potentialities, interests, and abilities. In such a system, nearly everyone could succeed and find a place in society where he could contribute, achieve, be respected, and respect himself.

If education were designed to remove the blocks to achievement, to individual growth and development (learning in the true sense), it is quite probable that we would have a much healthier society--less crime, delinquency, prejudice, discrimination, and poverty; fewer divorces, broken families, abandoned children; less competition for status, power, prestige, and material wealth. But our traditional system not only fails to create the conditions for creative expression, individuality, questioning, exploring, and thinking, it more often than not punishes the student for these behaviors and does its best to create and maintain dependency and conformity.

Student Protests

And what do the students have to say about all this? Plenty, but they have trouble being heard. They have difficulty gaining an audience, and when they do, little or nothing is accomplished. They are asked to be patient, or they are challenged to come up with something better if they don't like the present system, and are ridiculed when they cannot. But as Ned Gaylin said in his review of Confrontation: The Student Rebellion and the Universities (Daniel Bell and Irving Kristol, Eds. 1969), "one need not be a physician to know that he hurts, and we cannot castigate the naive patient for trying to bind his wounds--no matter how clumsily--particularly when the experts stand idly by observing and noting."

Why should we expect the student to be patient? On the one hand, we tell him that time has run out. Problems created by man are of such magnitude that he must help us solve them--turn the tide so that problems are being solved faster than they are being created. On the other hand, we condemn him for his revolutionary thoughts and actions against bureaucratic systems that constitute the chief barriers to necessary change.

We tell him that change in our educational system must be a slow and gradual process, and we expect him to accept this and go meekly and passively back to books and lecture notes that he does not see as relevant to his needs, present or future. But if he does, his education will be little improved over that of his father. He will be lucky if education has changed by the time his children are in college. And by that time we might all be dead, if not from the pollution we have created on our little planet, then from our inability to solve the insidious problems of ignorance, arrogance, intolerance, greed, lust, selfishness, suspicion, distrust, fear, and hate that seem to be endemic to our society.

Why should he be patient when he knows that we have the knowledge and understanding to give him a better system?--when it appears to him that it is the system itself and individuals within the system that are preventing him from receiving the kind of education he could and should have? Why should he be content when the stalls are filled with books decrying the miseducation in our schools?--when so many people are saying that any change in man's present course toward self-destruction must begin with education?

What alternatives are we giving him when we ask him to quit protesting? He can learn to be a conformist and join the forces that support and perpetuate an educational system designed to produce conformists. He can try to work within the system to accelerate change, and end up being frustrated, disappointed, and disillusioned. He can say to hell with it and drop out, join the ranks of the apathetic and indifferent. Or he can tell the system to go to hell, and continue protesting, perhaps even advocating revolution. As distasteful or frightening as this might be, the last is probably the most responsible choice.

The question is not "whether" we should change our educational system, it is "when." And the answer, of course, should be "as soon and as fast as possible." Such a system cannot be tolerated at a time when we know enough about learning, growth, and development to create a new and more effective system. As Postman and Weingartner (1969, p. 208) said, "the only thing . . . at stake is our survival."

The Goals of Education

The purpose of education should be to prepare the student for life, not just to provide him with a superficial exposure to the accumulated knowledge and values of the past and with the minimal skills necessary for acceptable performance in a given trade or profession. There is general agreement among the writers cited that the primary objective of education should be, first, to help each person master the art of learning and, second, to provide him with the best possible support in the pursuit of his learning objectives.

With the knowledge and technology explosion and the ever-increasing number and urgency of problems requiring creative solution, the content of education is of necessity changing rapidly and drastically. Most of the information the student receives in school will be obsolete within a few years, if it is not obsolete at the time it is presented. The task of selecting the most important content for a given course and giving adequate coverage of a vast amount of material in the time available is becoming increasingly difficult. The trend in education (but in too few schools) is away from information transmission, therefore, toward providing the student with the methods, tools, skills, and understanding for continued learning, to acquire content as needed, to assess its relevance to his needs, to find its meaning for him, and to integrate it into his own system of understanding of the universe of ideas and concepts.

According to Carl Rogers (1967), "Learning how to learn, involvement in a process of change--these become the primary aims of an education fit for the present world. There must evolve individuals who are capable of intelligent, informed, discriminating, adaptive, effective involvement in a process of change." Our schools and colleges, according to John Gardner (1961, p. 143), "must equip the individual for a never-ending process of learning; they must gird his mind and spirit for the constant reshaping and re-examination of himself." "A broad and firm base for a lifetime of learning and growth will equip man to cope with unforeseen challenges and to survive as a versatile individual in an unpredictable world. Individuals so educated will keep the society itself flexible, adaptive and innovative." (Gardner, 1963, p. 26.)

The person John Gardner describes as "self-renewing" is described by Mazlow (1963), Rogers (1961), and others as fully-functioning or self-actualizing, one whose potentialities are being realized--potentialities for growth, achievement, creativity, happiness, fulfillment, and self-esteem; for effective and growth-producing relations with others; and for

adapting to changing conditions. This is the person who will be best equipped to solve the world's problems and create the self-renewing society.

We should no longer delude ourselves into believing that personal growth and development are not within the purview of formal education. Whether we like it or not, a person's educational experience is a major influence in the formation of his self-concept, self-confidence, aims, goals, aspirations, attitudes toward and relationships with others, and orientation toward the solution of problems. As stated in Perceiving, Behaving, Becoming: A New Focus for Education (Arthur Combs, Ed., 1962, p. 2):

> The fullest possible flowering of human potentiality is the business of education. It is our reason for being. Whatever we decide is the nature of the fully-functioning, self-actualizing individual must become at once the goal of education.

Education for Growth and Development

A person needs effective relationships with others to grow into a fully-functional human being. Deprived of accepting, supporting, approving, loving relationships, man is stilted in his growth. He is painfully aware of the emptiness, the lack of completeness, lack of fulfillment, the distance between himself and others, the suspicion and distrust, and he must react through submission, withdrawal, or aggression. Unfortunately, such deprivation is the rule rather than the exception, at least in this society, and education is a microcosm of the larger society.

Erick Fromm (1955, p. 71), in defining the relationship of man to society, said that mental health:

> must be defined in terms of the adjustment of society to the needs of man, of its role in furthering or hindering the development of mental health. Whether or not the individual is healthy, is primarily not an individual matter, but depends on the structure of his society. A healthy society furthers man's capacity to love his fellow men, to work creatively, to develop his reason and objectivity, to have a sense of self which is based on the experience of his own productive powers. An unhealthy society is one which creates mutual hostility, distrust, which transforms man into an instrument of use and exploitation for others, which deprives him of a sense of self, except inasmuch as he submits to others or becomes an automaton.

The healthy and unhealthy societies can also be looked at in terms of what Anderson (1959) called the "open and closed systems of human relating." Although he did not define the two systems, we can develop a description from his discussions of facilitators and inhibitors of social creativity.

The Open System	The Closed System
Attitudes and behavior toward others of trust, concern, responsiveness, respect, acceptance, support, and encouragement result in:	Attitudes and behavior toward others of distrust, lack of concern, lack of responsiveness, disrespect, lack of acceptance, lack of support, disapproval, intolerance, discouragement, disparagement, ridicule, condescension, domination, force, coercion, shame, blame, threats, punishment, restriction, control, regimentation, and rejection result in:
1. Freedom from defensiveness and concern for power, status, or security, which allows one to be self-abandoning task oriented, and to admit one's mistakes.	1. Defensiveness and concern for personal security, protection, power, and status, which results in self-centeredness and an inability to admit one's weaknesses or mistakes.
2. Self-confidence and self-esteem, which frees one to be more flexible and objective, to entertain new ideas, and to abandon the irrelevant.	2. Lack of self-confidence and self-esteem, which results in caution, inflexibility, inability to relinquish the old and explore the new.
3. Freedom and individuality; spontaneity, initiative, creativity, originality, innovation, experimentation, and curiosity.	3. Conformity and submissiveness; control; lack of spontaneity, initiative, creativity, originality, innovation, experimentation, or curiosity.
4. Warm feelings toward others, appreciation, satisfaction, cooperation, and involvement.	4. Anger, resentment, hate, hostility, aggression; resistance, rebellion; bewilderment, frustration, dissatisfaction, disappointment, grief, withdrawal.
5. Mutual, reciprocal, growth-producing relationships.	5. Mutual, reciprocal fear and distrust.
6. Harmony and cooperation.	6. Conflict and competition.
7. High confronting and free interplay of differences without personal conflict.	7. Avoidance of confrontation, openness, or revealing of differences.
8. Shared power, participative decision-making and problem solving.	8. Use of power over others; dictatorial and arbitrary decisions.

9. Honesty, integrity, congruence, and responsibility.	9. Deception, dishonesty, lack of integrity, incongruence, and lack of responsibility.
10. Positivism, optimism.	10. Negativism, pessimism, cynicism.
11. And, of course, attitudes and behavior toward others of trust, concern, responsiveness, etc.	11. And, of course, attitudes and behavior toward others of distrust, lack of concern, lack of responsiveness, etc.

Both systems are thus cyclical and continuous. The open system results in a "growth cycle," the closed system in a "vicious cycle" of restriction, suppression, and dehumanization.

Torrance (1964) described the closed system in higher education as being concerned mainly with the acquisition of knowledge, memorization of facts, and finding already known answers to problems. Unfortunately, this is the system one finds in the vast majority of classrooms at all levels across the nation. Such a system does little to meet the human needs of the open system, which are necessary and fundamental for learning, growth, and health (physical as well as psychological). Rather, the traditional approach to education, with its emphasis on domination, control, competition, and evaluation, perpetuates and reinforces the "vicious cycle" of the closed system.

Participative Education: An Available Alternative

The dissatisfaction with Traditional Education was expressed in this country as early as 1900, by John Dewey. Unfortunately, his teachings were misinterpreted and misapplied in Progressive Education, and he became the whipping boy for the reactionaries who rose in violent opposition to Progressive Education, or anything progressive. With slogans such as "Back to the Three R's," they attempted to take education back to the 19th century.

The pendulum has swung again, however, back to the ideas and teachings of Dewey, but with a new sense of urgency, with the increased sophistication of years of experimentation in classroom innovation, and supported by the existentialist and humanistic movements in psychology and philosophy, by the movement away from Freudian biological determinism toward a sociological approach in psychoanalysis, by more than twenty years of development in human relations training, and by nearly that many years of creativity research. Participative Education has roots in all of these areas, and brings together their contributions to an understanding of what man might become and the conditions necessary for his growth and development.

Participative Education is designed to pull together the pieces of the revolution into a consistent, unifying philosophy and methodology that could be readily adopted by an individual teacher in his classroom or by an entire school system or university. The description of the approach will be based on what has been gleaned from the many exciting innovations or experiments being conducted throughout this country and England, as well as from our own experiments, particularly at the College of Engineering at the University of Utah and in Peace Corps training (Harris, Wight, and Tucker, 1969; Wight and Casto, 1969; Wight and Hammons, 1970).

The name, "Participative Education," was borrowed from the trend in industry toward "Participative Management," because it best describes what actually happens. The implication and intent are that the student is not the recipient of education but a participant in the educational process. The teacher, or instructor, is not a transmitter of information, but a coordinator of learning.

What is Participative Education?

Participative Education focuses on the process of learning, on preparing the student for continued learning beyond his school experience. This means active involvement in the determination of goals, identification of educational needs, identification and solution of problems, analysis and evaluation of solutions, and generalization to other problems, particularly problems of the world beyond the school experience.

Involvement of the student in the determination of his educational goals means finding out what will be required of him in his profession and in life--the kinds of problems he will have to solve--and planning, with faculty guidance (and continual review and modification), a course of study that will give him adequate preparation.

For a specific course, the instructor establishes provisional objectives, but these are subject to modification through interaction with the students. Each student should see clearly how the goals of the course relate to his own overall goals. He should help define the specific objectives, should help identify meaningful problems within the scope of the class, should be actively involved in discovering what needs to be learned to solve these problems, and should seek this information himself, making use of any available resources. The problems he is given, or those he generates himself, should be meaningful in terms of his interests, concerns with life, or the requirements of his chosen profession. And in struggling to solve these problems, he should be developing the skills and understanding he will need to solve other similar or more complex problems later on, working alone or with others.

The argument, of course, is that the student is not equipped to define the goals of something he as yet knows very little about, that he has not had the experience to identify problems or evaluate solutions, and

that learning by discovery is a slow and painful process, too slow for the demands of the modern world. The traditionalist says that if he will put himself in the hands of an experienced teacher, trust his judgment, and do as he is told, he will learn more in less time than if he struggles blindly to learn by himself.

He will not learn how to learn or learn how to solve problems, however, if he is not allowed to become an active participant in the learning process. If learning content is the goal, the evidence shows that one approach is no more effective than another. Dubin and Taveggia (1968, p. 35) concluded that data from 91 comparative studies "demonstrate clearly and unequivocally that there is no measurable difference among truly distinctive methods of college instruction when evaluated by student performance on final examinations."

But as Dubin and Taveggia and a host of others propose, other goals might be important, goals which might bring a whole new set of activities into the school environment. If student interest and involvement, breadth of understanding, application of what is learned to the solution of real-life problems, self-confidence and self-esteem, ability to work effectively with others, understanding of goals and direction, and self-motivated, continued learning are important, the evidence (admittedly subjective and impressionistic, for the most part) is clearly in favor of Participative Education.

The instructor who decides to use Participative Education may have to assume more responsibility for direction and guidance in the beginning than ideally would be desirable (particularly with students who have been in traditional courses all their lives). If students do not know or have been insulated from the problems with which the course is concerned, they should be confronted with situations which may become real problems for them in the future. As they gain understanding, they can participate more actively in identifying problems, defining goals, and assuming more of the responsibility for their own learning.

The Participative Education process might be further clarified through comparison with other processes we see in education (see Fig. 1), all of which are determined largely by the teacher's orientation, style, or approach to interaction with his students. What the student does depends, for the most part, on the structure and rewards provided by the teacher. The same holds true for the relationship between the teacher and those over him, substituting teacher for student and administrator for teacher.

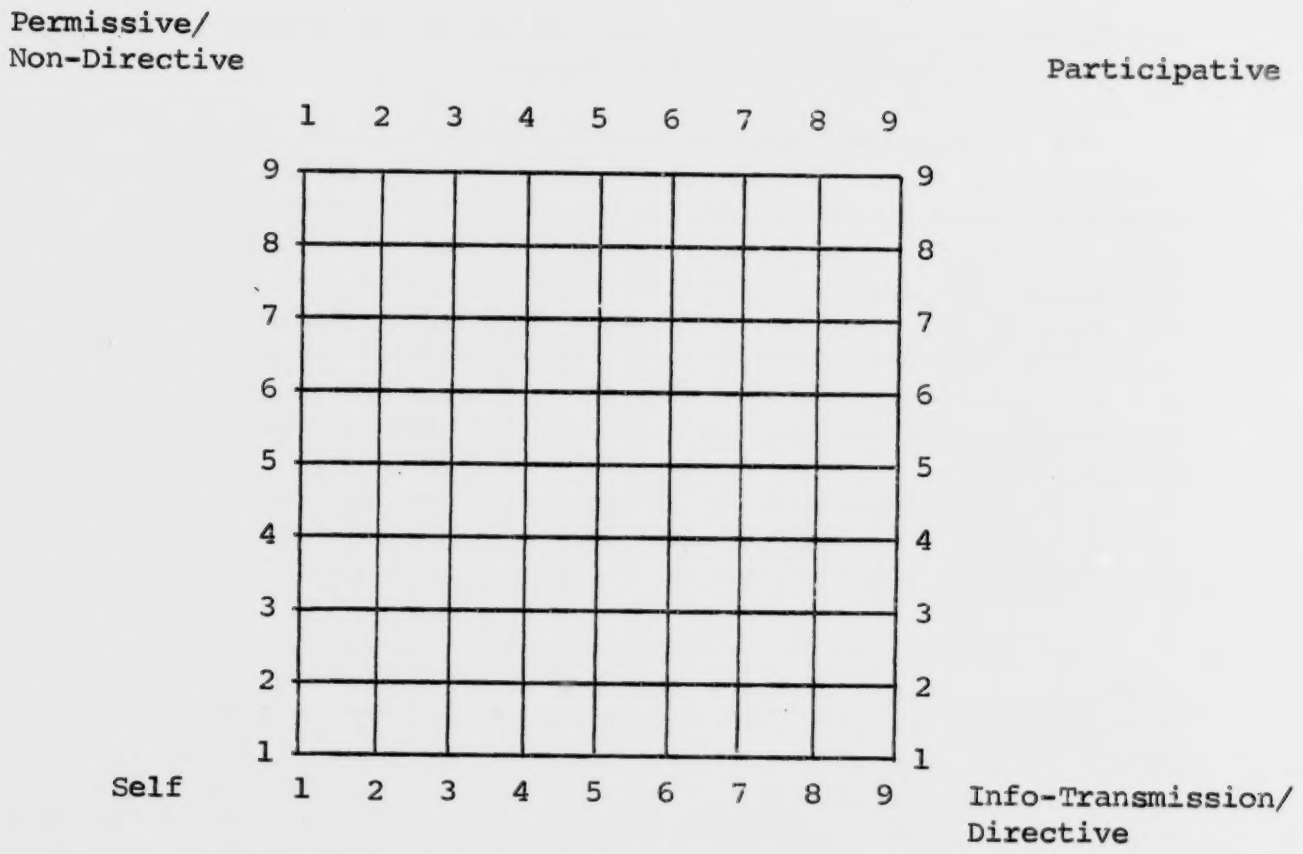

Figure 1. - Education Orientation Matrix*

Reading the Orientation Matrix (Fig. 1) right first and then up, the coordinates for the Self position are 1,1. Coordinates for the Information/Transmission/Directive position are 9,1; for the Permissive/ Non-Directive position 1,9; and for the Participative position 9,9. It is assumed, however, that few teachers or administrators would fall at any of the extremes, but would be located somewhere within the matrix.

The Self position (1,1) we can dispense with quickly, although it does create a great many problems in education. It is manifested by an attitude of "What's in it for me?" in any decision-making situation--"What do I stand to gain or lose?" This results in avoidance of decisions, or decisions designed to gain or maintain security, power, status, prestige, recognition, etc. Interactions with others (even students) are, for the most part, avoidance or win-lose. The other person is perceived as a possible personal threat or as someone who can meet one's personal needs--for acceptance, love, respect, admiration, etc. The closed system described earlier is characterized primarily by the Self

---

*The idea for graphic presentation in the form of a matrix was borrowed from Robert R. Blake and Jane Mouton's Managerial Grid (1969).

and Directive (9,1) orientations, and produces these orientations in those who are victimized by the system.

The Permissive/Non-Directive* position (1,9) is found occasionally in education (i.e., "Progressive Education") and is characterized by complete faith in the child to learn through experience and discovery, with little or no guidance. He is not required to learn anything unless he himself manifests an interest and initiates the learning activity. The role of the teacher is to provide support and encouragement in self-initiated learning activities. The assumption is that the child's interest will broaden as he experiences the rewards of self-initiated learning activities, and that he will develop the same respect for the rights and individuality of others that he has been shown by those around him. It is unlikely, however, that Permissive Education would be as effective as Participative Education in developing one's ability to work productively and creatively with others or in helping one learn to confront reality.

The Information/Transmission/Directive position (9,1) defines the Traditional Education which prevails in most of our schools and universities today, and has been described at length in earlier pages of this paper. The assumption is that the teacher or the system is in a better position than the student to know what is good for him. The student is expected to accept this and to willingly cooperate while the teacher decides, directs, controls, and evaluates. The student should not be expected (or sometimes even allowed) to do anything on his own until he has been given all the facts and taught what to do and how to do it. He should be given a solid foundation in the fundamentals (for sixteen years) before he can be expected to apply these fundamentals in self-initiated problem-solving or learning activities.

Most of the assumptions of Traditional Education are implicit rather than explicit, however, as Carl Rogers (1967) has said, inferred from what teachers do rather than what they say. But the student gets the message. He is lazy, and cannot be trusted to assume the responsibility for his own learning, to think for himself, to make his own decisions, or to evaluate his own performance or progress. The teacher is the expert and the authority. Creativity, independent thinking, and initiative are not valued. Conformity and passive acceptance of the system are.

The Participative position (9,9) involves the teacher and the student working together to identify and achieve learning, growth, and development objectives of the student. It is assumed that if students are to learn responsibility, they must be given responsibility (and not just the responsibility to do as they are told). If they are to learn to think for themselves and to solve problems, they must be given opportunities to

---

*"Non-Directive" is used here as it is commonly used in the United States, not as it is used by T. R. Batten of England, whose "non-directive techniques are closely akin to the "Participative" techniques described here.

identify and solve problems. If they are to learn to regulate their lives in accordance with realistic aims and goals, they must be allowed to participate in goal setting. If they are to learn to work effectively with other people, they must have the opportunity to work with others in problem-solving situations. If they are to be held accountable for their behavior outside the classroom, they must be given some freedom to act on their own decisions but held accountable for and helped to examine the consequences of their actions. If they are to develop self-confidence and self-esteem, they must have success experiences in self-initiated activities.

Participative Education is based on the premise that the student is able to assume the major responsibility for his own learning, that he can and will, if given the opportunity, establish realistic learning goals, that these goals will be modified with experience, and that as he learns from experience in such a system he will incorporate the learning process as a way of life and continue to use it beyond and outside the educational setting.

Participative Education assumes that learning is facilitated:

- o by trust in the student as a responsible person, with a natural propensity for learning and aims of personal growth, development, and achievement.
- o by active assumption of responsibility for one's own learning.
- o when the student perceives material he is studying as relevant to his needs and the needs of the world.
- o by independent thinking; when the student identifies his own meanings rather than memorizing meanings assigned by others. (In fact, there very likely is no meaning other than meaning assigned by the individual.)
- o when material studied can be related to personal experience.
- o when the student learns by doing. (Active involvement is far more effective than passive involvement in the learning process.)
- o when the student is attempting to solve a problem that is meaningful to him or to satisfy his own curiosity.
- o when the student is allowed to make his own judgments, choices, and decisions; when he is not given advice but is helped to explore alternatives; and when the teacher is not perceived as the final authority.

- when creativity is encouraged and supported--open-ended questions and problems, exploration of alternatives, the search for new interpretations, ideas, and solutions.

- when it involves feelings, emotions, and personal involvement, and not just intellectual impersonal activities.

- when it allows personal creative expression.

- when the emphasis is on involvement in the process of learning more than on transmission of factual information.

- when the student is involved in the discovery of knowledge and not relegated to the position of dutifully memorizing what someone else has discovered.

- when self-evaluation is primary, and evaluation by others is to provide support to the student in his own self-evaluation--when evaluation is against achievement of specified objectives and not relative standing in class. The practice of assigning grades to students' work inhibits learning by creating false goals--the goal of getting a grade, not learning--by creating a climate of competition among peers, and by taking the responsibility for evaluation away from the student.)

- when feedback regarding evaluations is descriptive, not judgmental, and when communicated with genuine concern for the person's learning and growth.

- when punishment is missing, and the individual must assume the responsibility for the consequences of his own actions or for correcting or learning from his own mistakes.

- by cooperative interaction with peers in problem-solving, information-seeking, assessment and evaluation activities.

- by becoming involved as a facilitator in others' learning activities (as a peer, teaching assistant, or instructor).

- by development of concern for the learning of others.

- by open communication, exchange of ideas, challenging, confronting, and asking questions. (The lecture is a very inefficient teaching method--one-way communication inhibits learning.)

- when the students' ideas, opinions, suggestions, criticisms, and feelings are valued by the teacher.

- by active involvement in another person's (i.e., the instructor's) research activities.

- by informal, friendly relations with the teacher.

Role of the Instructor

In Participative Education, the instructor serves primarily as facilitator, catalyst, and resource. Much as a coach, in the beginning he provides the rules and structure, he helps each person develop the skills and understanding to play the game or to perform effectively, and he works with each individual to help him continuously improve his performance. He emphasizes cooperation and teamwork (although the objective might be competition with another team), so that the team can assist in the development of each team member and each team member and each individual can contribute as much as possible to the effectiveness of the team. But it is the player, not the coach, who plays the game, and in Participative Education, the game is learning.

The role of the instructor is quite different from his role in Traditional Education. The differences are sometimes subtle, but nevertheless important. A comparison might help clarify the differences between the two:

The Participative (9,9) Instructor	The Traditional (9,1) Instructor
o Focuses on the process of learning how to learn.	o Focuses on the presentation of content, facts, and information.
o Involves the student actively in assuming the responsibility for his own learning.	o Assumes the responsibility for deciding what the student needs and motivating him to learn.
o Helps the student learn to be an active information seeker, identifying and making effective use of available resources.	o Decides what the student needs and provides it through lectures, reading assignments, films, etc.
o Expects the student to learn to find and use information as needed to solve problems.	o Expects the student to learn the material presented, for recall on examinations.
o Expects the student to learn by exploration and discovery, asking questions, formulating and testing hypotheses, solving problems.	o Expects the student to learn primarily by memorization and formulation of responses to questions.

o Focuses on the creative process of identifying and solving open-ended, real-life problems with many possible solutions. There is no expert or one right answer.	o Focuses on the completion of textbook-type exercises or problems with "one right answer." The instructor is the expert.
o Formulates clearly defined objectives based on the needs of the student.	o Formulates objectives, but usually based on covering a specified amount of material.
o Involves the student in the identification of his own learning needs and objectives.	o Expects the student to accept the objectives specified for the course.
o Involves the student in assessment and evaluation of the learning experience, information obtained, and progress toward objectives.	o Assesses and evaluates the material he presents, effectiveness of presentation, and performance and progress of each student.
o Focuses on individual achievement in relation to the student's own needs and objectives.	o Focuses on performance in relation to the group, with grading on the normal curve.
o Focuses on helping the student learn to work effectively with others in cooperative, problem-solving activities.	o Focuses on competition with peers, for achievement, recognition, grades, and other rewards.
o Focuses on group discussions and activities conducted and evaluated by the students themselves.	o Focuses on lectures, group discussions, and other activities led and evaluated by the instructor.
o Works toward open communication between students and faculty and among the students.	o Focuses on one-way communication from the instructor to the students, with little communication from or among the students.
o Avoids giving "advice" but helps the student explore alternatives. Supports the student in making his own decisions.	o Gives the student "advice" regarding actions he should take or perhaps even the career or profession he should select.
o Invites ideas, suggestions, and criticism from the students; involves the students in decision-making.	o Makes the decisions or carries out decisions made by the faculty or administration; discourages suggestions or criticism from the students.

o Promotes a questioning attitude, constructive discontent, reliance on the student's own judgment.	o Requires respect for the instructor as the authority, distrust of the student's own judgment.
o Attempts to develop a climate of openness, trust and concern for others, with maximum feedback to each person of information he needs to evaluate his performance and progress.	o Promotes competition among students, creating a climate of distrust and lack of concern for others; provides feedback to students regarding performance on examinations.
o Structures the course so that unplanned and unexpected problems will be treated as learning opportunities.	o Follows the course outline closely; avoids problems or dispenses with them quickly so they will not interfere with the schedule.

The role of the participative instructor is not an easy role for the traditional instructor to assume. It represents an entirely new system of attitudes and behaviors. Instructors trying the participative approach have found that even if they can accept this approach and their new role intellectually, it is often difficult for them to adapt emotionally and behaviorly. Over a period of many years as students and instructors in the traditional educational system, they have developed a pattern of conditioned responses to the stimuli of the classroom. This pattern is very difficult to change, particularly when many of the students will resist the change and try to force the instructor back into the familiar, traditional role.

Most students have had very little practice in school with the use of the inductive, discovery, and critical-thinking modes of learning required in Participative Education. They are much more familiar and comfortable with the traditional modes--memorizing from lectures and reading assignments, completing exercises and taking tests assigned by the instructor. They need to relearn how to learn, in a way that was probably quite natural to them as young children, but which was stamped out as they learned to accept the authority of their teachers and to discount their own judgment and experience. In many ways learning in the natural way is more difficult, however. It requires more effort, investment, and responsibility.

Comparison of the Participative (9,9) and Traditional (9,1) Models

It might help to present a comparison of the participative and traditional approaches in a hypothetical course to clarify the differences between the two. As can be seen in the comparison, the traditional approach places primary emphasis on the transmission of information, while the participative approach emphasizes the student's responsibility for his own learning through the solution of challenging, meaningful problems.

Participative (9,9)	Traditional (9,1)
1. Students and instructor define and redefine objectives, using provisional objectives established by instructional staff as a base.	1. Instructor decides on objectives. These may be more implicit than explicit and may or may not be communicated to the students.
2. Students and instructors identify significant problems* and questions.	2. Instructor lectures to students or assigns reading on things he thinks they should know.
3. Students identify and make use of available resources to obtain information they need to solve problems.	3. Instructor conducts demonstrations; students observe.
4. Students explore alternative solutions to problems.	4. Instructor assigns practical exercises or problems. Students complete the assignment.
5. Students and instructors examine, compare, and evaluate the various solutions.	5. Instructor prepares tests for knowledge and understanding. Students take the tests.
6. Students and instructors evaluate individual performance and learning needs, and redefine objectives.	6. Instructor evaluates the student's performance and assigns grade.

In contrast to the Participative Education approach, little opportunity is provided the student in Traditional Education to begin thinking for himself beyond the areas defined by the instructor. It is difficult for the student to see beyond the immediate requirements of the system. Rewards are for conformity, restricting one's thinking to the application of principles and formulas to the solution of problems which may have little meaning to the student. Little opportunity is provided for interaction between the students and the instructor, sometimes because of the large size of the classes, but usually because of the formality and structure of the system. Also, there is little interaction among the students, except on an informal basis outside the classroom. Seminars attempt to

---

*These problems are not typically found in the traditional textbook. The textbook exercises usually are designed to relate quite easily and quite specifically to one or a very few principles in the text and lecture. The textbook exercises are tightly constrained so that there is usually a unique solution by only one approach. The problems used here will have more of the real-life characteristics; many approaches and oftimes many solutions.

make up for some of these deficiencies, but the instructor is still in the role of the expert and usually very much the central figure.

Experiential Learning

To assist the students in understanding the learning process in Participative Education, they are given a learning model to use as a guide in individual and group activities. The model also serves as a guide in the structuring of class activities, and the process is reinforced at every opportunity by the instructor. The purpose of the model is not only to facilitate learning, but to facilitate learning (or re-learning) how to learn.

The experiences of the person, the action he takes, the process of solving a problem, the data or information he collects, and the process of collecting the data are all treated in a very similar fashion in the process. The model represents not only the proposed educational process to be followed in the classroom, but a continuing process to be internalized by the student as he "learns how to learn." The responsibility for the process is gradually shifted from the instructor to the student, and the rewards are shifted from external rewards of recognition and so on of the system to internal rewards of achievement and satisfaction inherent in the process. External rewards would not be eliminated, but would support responsibility, self-initiated activities, and creativity, rather than conformity. Punishment is virtually eliminated.

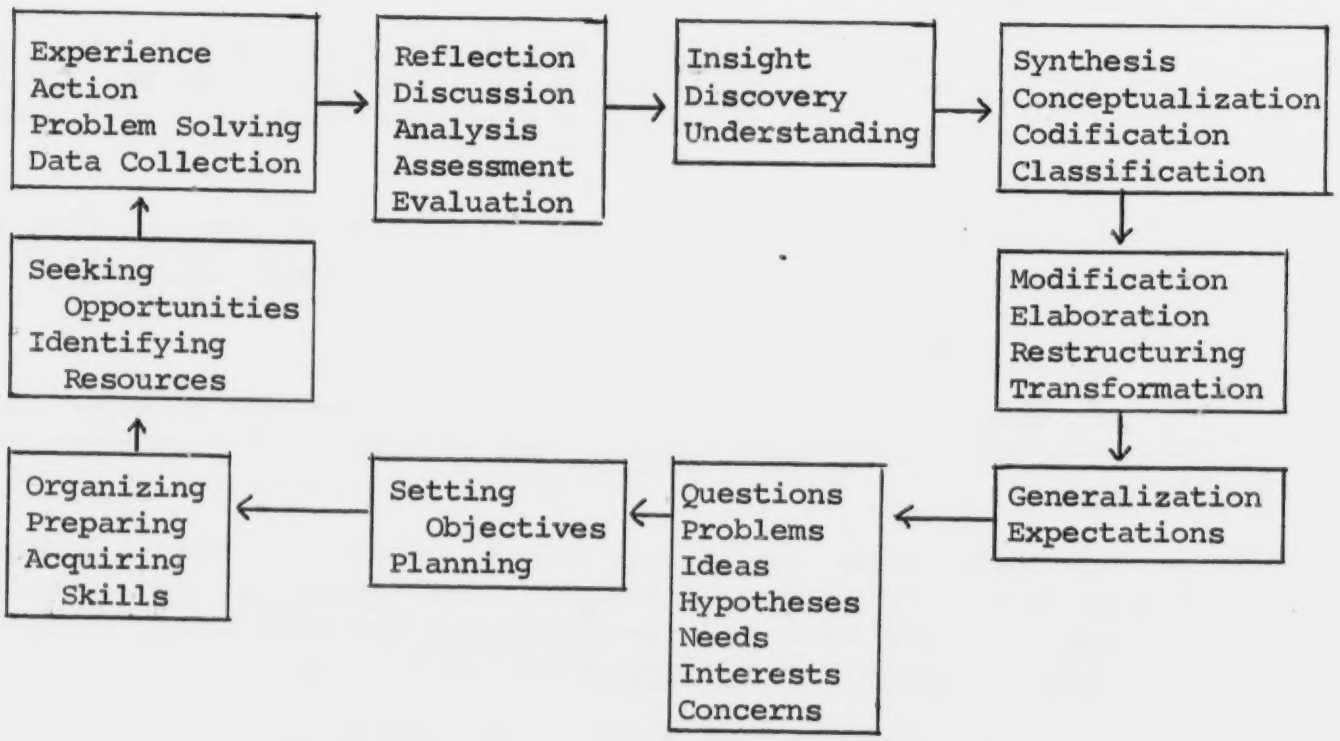

Figure 2. - The Experiential Learning Model

Looking at the process in the Experiential Model:

1. Experience is defined rather broadly. It includes anything that happens that has any impact on the student, anything he experiences--participating in a new or different educational methodology, interacting intensively with faculty and peers, solving problems and completing exercises presented by the faculty, problems that develop, dilemmas, making or not making decisions, responsibility or lack of responsibility for learning, etc.

2. Participative Education is structured to allow time for experiential learning, which begins with the experience, followed by reflection, discussion, analysis, and evaluation of the experience. The assumption is that we seldom learn from experience unless we assess the experience, assigning our own meaning in terms of our own goals, aims, ambitions, and expectations (which become progressively more clear as a result of the process). Preferably this is done with others who might not share our particular biases or perceptions. If we do not share our experience with others, the process can lead to reinforcement and rigidification of existing biases and assumptions. The experience and discussion take on added meaning if they can be related to objectives that are meaningful to the student, and evaluated against criteria he has helped to develop.

3. From these processes come the insights, the discoveries, and understanding. The pieces fall into place, and the experience takes on added meaning in relation to other experiences.

4. All this is then conceptualized, synthesized, and integrated into the individual's system of constructs which he imposes on the world, through which he views, perceives, categorizes, evaluates, and seeks experience.

5. The introduction of the new information or understanding may allow or require the individual to modify, elaborate, restructure, or even to completely transform the particular concept or construct into which it is assimilated.

6. The new concept or construct is now viewed in relation to the total system of constructs, generalized to past and future experiences. He faces the world with a new, different, or modified set of expectations.

7. During these activities, however, a clearer picture is obtained of what is missing or what is not yet clear--questions yet unanswered; problems that need to be solved--hypotheses are formulated; ideas develop; and needs, concerns, and interests are identified.

8. Objectives are then established, and plans are made to achieve these objectives.

9. The necessary organizing and preparing is done to set the plans in action. Measures are taken to acquire any additional skills needed.

10. Resources are identified and opportunities are watched for to gain additional experience, take action, solve problems, or obtain necessary information or data.

In experiential learning the emphasis is on creative problem solving, a process involving steps or phases such as the following:

1. Problem identification or recognition

2. Definition and redefinition of the problem

3. Exploration of possible approaches, perceptions or interpretations

4. Collection of data about the problem in preparation for solution

5. Development of criteria for evaluation of solutions

6. Generation of possible alternative solutions

7. Analysis and evaluation of alternatives

8. Testing, verification, feedback

At the end of the problem solving process, or at any point in the process, the student then proceeds into reflection, discussion, assessment, evaluation, and on through the experiential model, as he would with any other experience.

Data collection, or information gathering, logically follows the perception of need, a need to answer certain questions, fill in gaps in understanding, or to find facts or principles needed to solve problems. It would include any of the traditional ways of collecting data--lectures, reading demonstrations, feedback, etc. But used within the Experiential Model, these processes become more interesting and the data more meaningful and relevant. The purpose of data collection is to obtain information that the student needs or feels he might need sometime in the future. The student is not being spoon-fed information or facts he sees no particular need for or does not understand, but instead is actively seeking information he himself has decided he needs or would like to have, either in preparation for solution of problems he can anticipate, to develop a better understanding of the situation he will be in, or because of a genuine interest and curiosity.

The information is not just memorized for later regurgitation, but is discussed and evaluated, compared with other known facts or related information, incorporated into the individual's construct system, and so on, following the Experiential Model. Even if the objective were only information transmission, it is suspected that this method would be more efficient and effective.

Lectures and Other Traditional Techniques

Participative Education attempts to involve the student in meaningful, relevant experiences, and to provide him with the opportunity and a methodology for learning from this experience. As mentioned before, this does not mean that the lecture, demonstration, assigned reading, memorization, and other techniques usually associated with the traditional approach are ruled out. Within the experiential methodology, a lecture is not given to meet the need of the instructor to pass on information or to impress or entertain the students. It is given to meet an expressed or apparent need of the students, at a time when they are ready and receptive. But even the method of presentation is changed to allow for more active participation of the students--prescribing content or information they want, questioning, interpreting, and evaluating.

Some conflict will always exist, of course. The instructor will have content that he thinks is important to give to the students for which at least some will not recognize a need. It is the responsibility of the instructor, then, to attempt to create the conditions or situations that will help the student recognize the need, rather than to cram the content down his throat whether he wants it or not.

Perhaps a more legitimate concern is that the instructor does have information and understanding that should be passed on to the students. Very often, however, the instructor is so pleased with his discoveries and insights that he wants to pass these on to his students, without realizing that he is denying the students the same joy of discovery or achievement by asking them to perform the relatively dull task of learning or memorizing what he has discovered through a long and difficult process. He forgets, too, that his own learning has been slow and incremental, and that his very clear and logical insights may not be readily understood and appreciated by his students.

Instruction

Participative Education requires flexibility in attitude and role, on the part of both student and instructor, however. "Instruction" most certainly still has its place. I would like to have someone give me instruction before I tried to operate a power saw or fly an airplane. I certainly would not want to learn by "discovery" or "trial and error." Yet telling me, with any number of instructional aids, will not teach me

how. After the initial instructions I have to learn by doing, at first with considerable guidance by the instructor, and finally entirely on my own. In the process of learning I become aware of additional things I need or would like to know. Some of these I can learn on my own. With others, I seek help or information from the instructor (who now is serving as a resource person). This is Participative Education.

Behavioral Objectives

As useful and important as behavioral objectives are, they can lead us into the trap of deciding what is good for the student. One danger of instruction by behavioral objectives is that someone other than the student, and sometimes other than the teacher, usually decides what behavior is desirable on the part of the student, defines the behavioral objectives, and devises an instructional program to achieve these objectives. The student finds himself in a highly efficient system that allows him little opportunity to identify or pursue objectives of his own.

But he should have this freedom. It is not necessary that all learning have immediate, definable utility. The learner's objectives do not have to be behavioral; they can be stated: "I would like to learn more about _____," or "I would like to pursue an interest in _____," and be perfectly acceptable. In fact, these are preferable to any objective defined by anyone other than the learner.

Behavioral objectives can be of assistance to the student, however, if used to support and not to control his learning activities. If the instructor can specify the behavior required and minimal levels of acceptable performance to qualify for a job or a subsequent course offering, this information should be given to the student. Beyond the minimum requirements, however, the student is free to develop his own abilities to achieve whatever level of proficiency he wishes or is able to achieve. Under these conditions he is more likely to strive for higher levels than when objectives are established and performance is evaluated by the instructor.

Objectives are important, particularly for individualized instruction, if a student is to be allowed to progress at his own pace. He and the instructor need definable, measurable criteria for his advancement from one unit to another. Covering a certain amount of content, or solving a specified number of problems, may not be sufficient, unless the student can demonstrate that he has sufficient understanding and skill to undertake the next unit. The student advances, then, when he is ready.

Too often, however, educators use behavioral objectives to evaluate the performance of students without involving the student in this evaluation. Most behavioral objectives are written so that an outside observer can do the evaluating, but if we are supporting the student in his own self-evaluation, this is not necessary. In some cases, if he knows he has achieved the objective and can communicate that he has, this may be all

that should be required. He may have to demonstrate in some way, however, that he has completed the requirements necessary to enter the next unit, course, or sequence of instruction.

A Total Systems Approach to Education

Ultimately, in education, a total systems approach should be developed, showing the relationships among the objectives or courses--courses with parallel, complementary objectives and courses with sequentially planned objectives, leading ultimately to entry level requirements for a given trade or profession. The meaning and purpose of any given course would become much clearer to the student, and he would have a much better basis for deciding among the various alternatives available to him, or for branching into another sequence, than would ever be possible under the present system.

Minimal levels of acceptable performance would be specified for the completion of one course and qualification for the next in any sequence. This does not mean that some deviation would not be allowed. If a student finds, for example, that in pursuing a given course, he needs calculus to solve certain problems (say in physics or engineering), he might branch into a programmed course in calculus. In this case, it would not be taken because it was a requirement imposed on him by the system. His motivation would come from a perceived need to solve problems that were meaningful to him.

Such a system would not and should not preclude following one's curiosity or interest with no particular ultimate objective in mind. Learning for its own sake, the love of learning and exploration, should be fostered and encouraged, as it would be in Participative Education, but at the same time, the system of objectives showing clear paths of development toward ultimate professional aims or aspirations would provide a necessary contact with reality. Excursions or side trips into areas of special interest would not only be personally rewarding but would be professionally broadening.

Degrees

Hopefully such a system would ultimately eliminate the need for degrees as we know them. The time when a person could get his degree, go to work and forget about school is long past. Licensing could be required instead, for those few professions where it was essential to keep unqualified persons out (i.e., medicine). A person would continue in school until he was ready to go to work and had completed the requirements for that particular job. He would continue taking courses, or studying on his own, to qualify for better jobs, to keep up with developments in his field, and because of his own curiosity and the joy of learning. Ideally, the student would begin working early in his school career, either part-time or for periods of time away from school, to gain more experience and a broader perspective. What is learned in

school is far more meaningful if it can be related to the student's experience outside school.

Grading

Grading has always been a problem, but is more so in Participative Education. Ideally grading would be eliminated altogether. Grades mean only that the system distrusts the students and needs this ultimate means of control, or that objectives are not defined clearly enough to support the student with meaningful measurements. If the system is still antiquated enough to require letter grades in spite of the total lack of justification, grades may have to be submitted for a time. Nearly everyone who uses grades should be aware of the many research studies showing that there is virtually no relationship between grades and performance on the job or any other aspect of life outside academia. Grades predict grades, but nothing else other than I.Q., which is also virtually meaningless. Employers use grades because they have nothing else. Records of performance kept against meaningful objectives would provide much better information for placement, both on the job and in school.

When grades are required, students should be involved immediately in defining and clarifying objectives, developing measurements, and deciding on criteria for grading. They should also be involved in collecting measurements and establishing grades. They will resist the responsibility for grading, however, because they do not want to contribute to an official record of their own inferiority, nor do they want to be in the position of having to help assign such a meaningless, but punitive, evaluation to a peer.

Instructors of traditional courses sometimes complain because participative instructors are assigning higher grades and are not grading on a curve. It is easier for the student to see what is expected of him in Participative Education, particularly when he has participated in establishing the criteria for determining grades. It is thus easier for him to earn a higher grade than if he were in a similar traditional course (although he might also work harder). If the students earn a higher grade, they deserve a higher grade.

Students in Participative Education are much more actively involved and exhibit more behavior and a wider variety of behavior. If grades are required, it becomes difficult to decide which aspects of performance should be considered, or how they should be weighted in determining a simple letter grade. If grades are not required, a profile could be developed for each student as a supplement to grades, showing how he was performing against as many criteria as the instructor, students, or prospective employers thought were important.

The Quarter, Semester, and Lock-Step System of Lower Grades

With an emphasis on progression at one's own pace, length of course becomes meaningless. This means that, ultimately, any school adopting Participative Education would have to break the lock-step, ladder system of grade level, as is being done in many schools. Moving from one grade level to another at the end of a school year makes no sense at all under such a system.

This means, also, that the quarter, semester, and trimester systems would have to be modified or eliminated. There is no justification for forcing all courses of study into such a restricted time period. If students in an individualized program are allowed to complete the requirements for a given course before the end of the quarter or semester, there is no logical reason for not allowing them to go beyond this time period if they need longer. There is also no reason at all why all courses should be required to be the same length. If not subject to the rigid constraints of the system, one course might take two months, another five, and another two years. This might create some administration problems, but the purpose of administration is to support instructional programs, not the other way around.

Elimination of Textbooks

Another change would be the elimination of most textbooks other than for the most basic courses or for historical documentation or reference purposes. Materials for a given course would come from journals, periodicals, or working papers, pulled together by the instructor and the students. In this way, material in any given course would be much more current than in present courses using textbooks containing material already several years old. Not only would the students be studying more current information, but they would be learning to make use of the many resources available to them for information and would be caught up in the excitement of knowledge as it is being developed.

Making Use of Available Resources

In a system that places emphasis on student responsibility for his own learning, an important aspect of the role of the student is making effective use of all available resources. One of the instructor's primary responsibilities is making these resources available. In addition to the instructor are other staff, professional and non-professional, the library, programmed learning, teaching machines, computer-aided instruction, television, films, audio tapes, video tapes, other students, and the whole outside world. With the guidance and support of the instructor, the student learns to make effective use of all of these resources and gains self-confidence and self-esteem through doing so.

Lectures could be put on video tape, to be viewed whenever the student chooses. This would free the instructor for other, more fruitful activities, particularly informal discussions with the students, involvement in their problem solving activities, serving as a resource, or helping the student make effective use of other resources.

Programmed learning and computerized instruction have their place in Participative Education as well, as important resources to the student. They allow the individual to progress at his own speed and to obtain immediate feedback regarding the correctness of his responses. They may be effective for the transmission of information and the teaching of simple problem solving skills, and should be used for these purposes when the need for the information or skills is perceived by the student. They are not adequate, however, for preparing the student to solve complex, open-ended, divergent-type problems in intensive interaction with others, which is probably the most important skill. They are not effective in teaching the human values and attitudes of concern for others, of warmth and spontaneity, of understanding how others think and feel. They do not teach persons to cope with conflict, differences of opinion, differences in belief and value, emotion, conflicting goals and needs, etc. They do not teach communication and listening. A bright learner could conceivably grow up a social and interpersonal cripple, totally unprepared for the realities of life, if his primary contact in his school years were with a machine. The personal attention and response the individual experiences with the machine might be less dehumanizing, however, than the experience of being unnoticed and unrecognized among a mass of students in the traditional classroom.

To meet those objectives that can best be met with individualized instruction, we should use the computer and programmed learning. For those objectives associated with creative problem solving, research, and learning to live and work effectively with others, we should use more appropriate techniques.

Use of Small Groups

Breaking large classes into several small groups is another aspect of Participative Education that allows much more involvement and participation on the part of the individual. With a growing number of students and increasing ratio of students to instructor, personal contact between the instructor and the individual student is becoming more difficult and less frequent. The instructor remains a stranger to the student. If the objective is to encourage and teach students to think about the problems and issues, to solve problems on their own, and to critically evaluate the information they are receiving, however, discussions with peers is more effective than discussions with the instructor or anyone else playing the expert role. Particularly in the beginning, until they have developed confidence in their role in Participative Education, students are less likely to voice their opinions or to explore and examine

alternatives if they are talking to the instructor. With the instructor leading the discussion, or sometimes even with the instructor present in the room, the students are looking to him for the expert opinion or for the correct answer. Then, too, it is very difficult to eliminate the fear of evaluation by the power figure.

The use of small groups is one of the major differences between Participative Education and Traditional Education, which makes little use of the group, and usually poor use when it does. For the most part, in Traditional Education, peer pressures and goals are antithetical to the goals of education. In Participative Education, however, peer pressure is more likely to be in support of rather than against the system--a system that is more likely to be perceived as being liberating rather than repressive.

Participative Education capitalizes on the small group as a powerful teaching/learning device. It makes use of the group not to develop conformity, but rather to maximize individuality, the assumption being that true freedom of individual expression can be found only in a social setting which endorses and supports individuality. The person in a restrictive setting conforms to the system or spends too much time rebelling, reacting against the system, to be truly an individual. In the latter case, his behavior is more an expression of his resistance to conformity than of his true, idiosyncratic desires, interests, aims, and ambitions. It is the rare individual who can free himself from dependency and counter-dependency in our society and become truly free and creative.

A group that has achieved healthy and secure interpersonal relationships will value and support individuality over conformity. Such a group promotes and supports individual expression; participation in such a group results in individual learning. Too few people understand that a person cannot be truly an individual except in relation to a group. The only way a person can achieve individuality is through creative interaction with other persons. The opportunity for such interaction must be provided by our schools.

Much of the learning in Participative Education results from the group interaction, problem-solving, and analysis and evaluation of experiences. Each person in the group becomes an important resource to the group and to every member of the group. Each person is able to compare his reactions to the various experiences with the reactions of others in the group, his understanding and interpretations of material and concepts presented with the understanding of other members, and his ideas, opinions, solutions, etc. with those of others in the group.

Learning and change will not necessarily occur in just any group, however, even though formed for this purpose. The groups should be structured to insure maximum involvement of the participants and to guide the individual in assuming responsibility for his own and his

peers' learning and development. The conditions for effective learning are explored with the groups and in the groups--clarity of goals, availability of resources, effective problem-solving activities, trust, openness, genuine concern for the learning of each person, responsible feedback of feelings and responses, etc. The groups are charged with the responsibility of contributing to the effectiveness of the group.

The students learn a great deal from each other in becoming aware of the varying reactions, feelings, and opinions. They also reinforce each other in their efforts to learn how to learn, and their discussions and activities in the group begin to follow the pattern of the Experiential Model. They learn to communicate with each other and the faculty, to work together effectively and harmoniously, and in the process of doing so, develop genuine concern for the other person's learning and progress. The individual learns the spirit and meaning of brotherhood and respect for his fellow man, and becomes secure in the knowledge that others care for him and value his ideas and opinions.

The size and membership of the small group will depend to a great extent on the nature of the course or the tasks undertaken. If the class is studying the works of a particular author--its meaning and significance, his view of the world, the message he was attempting to communicate, his style of writing, etc.--or the life pattern, social structure, cultural development, ideas, and contributions of a given group during a particular segment of history, the small group would be quite stable--the same students working together throughout the course. (The structure should provide for some interaction and exchange among the small groups, however.)

If it is more a skill or problem solving course (i.e., in statistics, mathematics, drafting, computer programming, physics, chemistry, architecture, engineering, etc.), group size and membership might change frequently, based on how fast or slow each student wants or is able to work. (The creative ideas do not necessarily come from the fast students, we have found.) These groups usually stabilize in a short time, however, as students find other students who want to progress at about the same speed.

In general, however, the groups should be small enough to allow each person ample opportunity to participate (ideally no more than ten persons) and yet large enough to afford a good mix of personalities and ideas. The groups should be as heterogeneously comprised as possible. Aside from the enrichment this provides, it is important that students learn to accept and to work with people who are different.

In Participative Education it is not necessary to have an instructor present in the group. In fact, it is probably better if the groups are left without an instructor or teaching assistant for many of their activities. With an instructor in the group, the tendency of the students is to avoid the assumption of responsibility for the

group's activities and for their own individual development. This remains the instructor's responsibility. The group looks to him for guidance, direction, support, and approval, and expects him to make observations and report these to the group. Without the instructor in the group, the students have no one but themselves to lean on, no one to make the decisions or tell them what to do, no one to observe their behavior and tell them what they are doing. They have to assume this responsibility themselves.

The assumption, which has been borne out consistently, is that the students can discover or seek out for themselves, without the guidance of a group leader, most of what would be taught in lectures or reading assignments and probably more. And, in doing so, they are much more involved, and quite probably achieve a much deeper understanding and greater retention of what is learned. They actually experience the learning (it is not just an intellectual exercise), and are much more committed to their findings and conclusions. It is assumed that the student who learns to think *for himself and solve his* own problems in school will be better prepared to think for himself and solve problems after he graduates.

With a leader in the discussion group or traditional seminar, the implied assumption is that someone needs to keep the group involved, active, and on target. The implication is that the group itself is not responsible enough to do so, or that the particular knowledge or understanding of the leader is necessary if the group is to learn anything. Admittedly, these sessions are probably more effective than a lecture, because the students can ask questions, seek clarification, and discuss implications of the information received. For the most part, however, the discussions are intellectual, academic, abstract, and impersonal. The leader is the authority. The students' opinions are of relatively less value, because they supposedly have not had the experience. The group does not examine itself, its own process of interaction, perhaps the most valuable learning data available. It cannot, therefore, relate what is happening in the group to what is being discussed. It deals strictly with the content supplied by the group leader, and much more of the discussion is between the students and the leader than among the students.

When there is no leader in the group, however, the group has to rely on its own resources, assume the responsibility for its own activities, analyze and solve its own problems. The important opinions are those that are held by the group members. These are compared and analyzed against criteria developed by the group. Each person learns a great deal about every other person in the group, not only what he believes, his values, attitudes, expectations, opinions, etc., but the role he plays in the group, the contributions he makes, and how effectively he works with others. When the group reaches a stage of development where this information can be shared by the members, each person has an opportunity to learn more about himself than he possibly could in any other situation, and what he learns is directly relevant to his future work in his profession.

Cooperation versus Competition

Another important consideration in the use of the groups in Participative Education is the opportunity they provide to learn to work together in cooperative, not competitive, endeavors with others. One of the most unfortunate myths in our culture is that competition is healthy, and should be promoted in our schools. In spite of the fact that it is the "great American tradition," most of the competition in our society is destructive. It pits one person against another in a win-lose contest. Winning becomes more important than excellence of product (we sacrifice excellence if it helps us win out over the other guy), and too many of us will push the other guy down if it helps us get to the top. This is what we are taught in our society, particularly through our entire educational experience in the traditional system, which judges us on our performance in competition (not cooperation) with the others in our class (as mentioned previously when discussing grading).

Instead, as the ASCD Yearbook Committee concluded:

> The classroom climate must support cooperative interaction. Here the teacher plays a key role in determining how authority is used and the kind of group procedures adopted. If competition is used as the spur to learning, pressure is exerted on children to achieve specific objectives, and learning itself becomes little more than a competitive performance. To win the prize--the grades, the scholarships and recognition--can become the goal of learning. The climate of anxiety engendered does not help children to develop an openness to experience. Instead, students tend to select only those activities which the school chooses to reward and to avoid the experimental, the exploratory study (p. 147).

> Not only do we need to know where competition serves a useful purpose and where it does not, but we need to know its limitations. There are many half-truths when competition is increased. Little do we realize the high cost we pay in human discouragement as a result of the many losers and few winners in competitive classrooms (p. 167).

> Competition fosters movement against or away from other people and, in general, a mistrust of one's fellows. Cooperation, on the other hand, encourages trust and movement toward other people and the affiliation and communication with others necessary for identification (with other human beings) (p. 166).

> Cooperative procedures free children to learn, to become their best and most creative selves. Relieved of the pressure and anxieties of competition they can use their fullest potentialities, and optimum involvement and progress are possible. But

> cooperation is learned and must be taught. Children must have opportunities to practice the skills of cooperative procedures. They need the freedom to define goals, to learn to plan, to interact and to try group management (p. 147).

Communication with the Instructor

It becomes disturbingly obvious when we begin Participative Education with a new group that people do not know how to talk to each other. Students cannot talk to other students. They most certainly cannot talk to the instructor, and the instructor does not know how to talk to them except in a lecture or very formal circumstances. One of the most important benefits of the small group interaction in Participative Education is that students learn to talk to each other about something other than topics of small talk and social conversation. When they have learned that their ideas and opinions do have merit, that they are valued by others, and when they have gained the necessary confidence, they are ready to begin to develop meaningful dialogue with the instructor. *When they* learn through this dialogue that he does, in fact, have respect not only for their ideas and opinions but for them as individual human beings, they develop quite a different attitude toward and feeling for the instructor than is typically found in the traditional classroom. The instructor, of course, also learns how to listen and to talk to the students, not as empty vessels to be filled with his nuggets of wisdom, but as capable, thinking, feeling, growing, developing, exciting human beings. He, too, cannot help but grow in the process.

One of the most frequently stated problems in education is the large classes and little time for achieving meaningful dialogue between the instructor and his students. In Participative Education, however, the instructor is freed from the task of preparing and delivering so many lectures, which allows him more time to interact with the small groups and individual students. If he is performing his function effectively as a resource person, students will be seeking him out to obtain information, to explore ideas, and to obtain his assistance in evaluating their performance or progress. This is not the con game that so many students play in the traditional system, but is a genuine and sincere appreciation of the support and assistance he can provide. These interactions are sometimes more difficult, frustrating, and taxing for the instructor than preparing a lecture would be, but also are most exciting and rewarding.

A very frequent criticism of universities these days is that instructors are involved more in research than in teaching. The instructor would not have to discontinue his research (although he might have to find more time for students), however, because Participative Education introduces a research orientation toward learning and toward life. Students other than one or two research assistants would be able to participate much more actively in the instructor's research, exploring ideas, hypotheses, methods, results, and implications, in a manner completely consistent with their approach to learning.

This would not only bring the students and instructor closer together, but would continuously stimulate ideas for research and exploration in the minds of the students. We would no longer have the situation we see so often in universities across the nation now--the paucity of ideas; so very many students who have been taught not to think, therefore having to ask instructors or more creative students for ideas for a masters thesis or doctoral dissertation.

Facilities

Most school plants as they presently exist are not designed for Participative Education. Few schools have made provisions for individual and small group work. Most classrooms are designed with desks in rows facing the podium and chalkboard in the front. This arrangement would have to be eliminated. Students are conditioned to responding passively when seated in desks in rows, and interaction among students, none of whom is facing one another, is very difficult.

A few rooms should be available for an occasional lecture, but unless the class is too large, even here a large circle is much preferred. Interaction is greatly facilitated by the use of the large circle. Many rooms should be provided for small groups--in fact, the small group room should be the basic unit of the school plant. Some of these can be learning stations, for individuals or small groups, with video or audio equipment, computer terminals, learning machines, selected references, etc.

The larger rooms would also be used for meetings of the total class, where decisions are made, tasks are assigned, issues are explored, problems are solved, information is sought, reports are presented, etc. The large circle should be used if at all possible; if not with all participants seated in a circle, then arranged by small groups, with each group together around a table and the tables in a circle.

Future school plants should be designed for Participative Education, but in the meantime, rooms can be remodeled, temporary partitions can be installed, desks can be moved, and several groups can use one large room (although group discussions do get noisy). Inadequacy of the plant should not be used as an excuse.

Qualifications and Training of the Teacher or Instructor

Carl Rogers (1969) mentions three characteristics that he feels are essential in the "facilitator of learning." One of these is "realness" or "genuineness," being what he is, not presenting a front or a facade. The second is "prizing, acceptance, trust"--prizing and accepting the learner as a person, his feelings and opinions; caring for him, but in a non-possessive way. The third is "empathic understanding"--the ability to put oneself in the position of the student, identify with the student and understand his feelings and reactions "from the inside."

This would be ideal, of course, but it would be impossible to find enough teachers and instructors with these characteristics, and educational reform cannot wait for their development in present and prospective teachers through therapy or encounter groups (if this were indeed possible). Another approach, which we firmly believe is possible, is a brief training program in the philosophy and methodology of Participative Education and some counseling and support as the teacher first attempts it. As the teacher sees his students come to life, and begin to develop into active, responsible learners, he will begin to develop more "trust and acceptance" of students. As he interacts with students and finds that he can be himself and not only retain their respect but gain their friendship, he will learn to be more "real and genuine" in his relationships with others.

What is required, however, is that he accept the objectives of Participative Education and at least be open to the possibility that it might be more effective than Traditional Education in achieving these objectives. If he does not accept the objectives or does not believe that Participative Education will work, it won't work. He cannot help but communicate his attitudes and beliefs to the students, not only with words but particularly by what he does. Students cannot accept the approach if it is not accepted by the instructor, unless they decide to take over the class and dictate to the instructor what his role will be.

Problems One Can Anticipate

Many problems can be anticipated when one attempts to introduce Participative Education, some of which have been mentioned briefly before. Aside from his problems and the students' problems learning to assume their new roles and responsibilities, the instructor can expect not only lack of understanding and acceptance but resentment and hostility from some students, faculty, administration, and persons outside the system. A change of this magnitude can be highly threatening to a great many people.

One always encounters a split among the students when the approach is introduced after they have been in school long enough to know "how school is supposed to be taught." Some students will criticize the instructor with considerable hostility for not assuming what they believe to be his responsibility and for trying to force them to assume responsibilities they never had to assume before. They will accuse him of not knowing his subject matter or how to teach, because he does not have his class organized with a series of well-planned lectures and reading assignments. If he expects the students to do all the work, what is he being paid for?

More research needs to be done on the differences between students who prefer one approach and students who prefer the other. George Stein (1962), in his review of research, reported that studies had shown that

"students who placed high on personal independence not only preferred the student-centered classroom, but were extremely critical of the subject-matter-centered section." He stated that "conversely, students who expressed the strongest need for direction and organization were also most intense in their dislike for the permissive teaching techniques."

We suspect, however, that the school experience itself contributes greatly to the need for direction and organization and suppresses independence. Perhaps it is the student who has learned to need direction and organization who is most in need of Participative Education.

Until the students learn to assume the responsibilities required of them in Participative Education, many will resist their new role. They will bait the instructor with questions they themselves could or should answer, and will ask for direction or decisions when they themselves should be deciding. They will try to force the instructor to give them the solution to a problem when they will learn far more by struggling with the solution themselves. It is too easy for the instructor who has not become skilled in the participative methodology to pick up the bait and do all the things he should not do if he wants to achieve active and responsible participation of his students.

The instructor also has to be aware of his own needs in the traditional system--the power he has over students who have to conform to his ways or leave, the satisfaction he gains from well-organized courses and well-delivered lectures, the security he feels when he is in control of the classroom situation. It is easy for him to fall into the trap of enjoying and perpetuating his position of power, authority, and influence. It is rewarding to be recognized as someone important, someone who knows more than others, someone who is approached for advice. It is easy for him to convince himself that what he is doing is best for the students, when he directs, controls, and passes on the benefits of his wisdom and experience. It is also less threatening to the instructor if he keeps the students at a distance, under control, and thinking and talking about issues with which he is comfortable.

Much of the resistance within the system will result from just plain inertia. A change in one course can affect the total system. Students become active and start asking questions, or possibly making demands, many more in the beginning because of their new-found freedom. This can disturb faculty and administrators who are comfortable and secure in what they are doing, many of whom are convinced that what they are doing is right. An Associate Dean of Engineering (not at the University of Utah), for example, stated: "I am quite skeptical about student-centered type teaching. I think students tend to be lazy and do not pursue the theory as far as they should."

As an example of the strength of feeling and reaction that can be expected, it would be worthwhile to examine some of the statements of

this very successful university instructor and traditionalist (who will go unnamed). In reference to students' needs for relevance, he said:

> Student demands for 'relevance' scare the hell out of me--not because of any fear for my own person, but for the enormous danger to their culture and mine by their insistence on acting out of admitted ignorance on fundamental matters. Students do not know what is or what is not 'relevance'.

The participative approach to education assumes that if a student is not receptive to information or does not see its relevance to his needs, he may hear very little of what is said, understand little of what he hears, and retain little of what he understands. Our traditional professor says, "This son of a bitch ought to be thrown out. You have enough trouble as it is." Carl Rogers (1969, p. 103, 104) said that he knows of no assumption so obviously untrue as the assumption that "what is taught is what is learned; what is presented is what is assimilated." Our traditional professor would have few students left in his classroom if he followed the course he advocates here.

In reference to emphasis in Participative Education on placing the responsibility on students for their own learning, our traditional professor said that this idea:

> is just damned rhetoric that can lead to nothing but mischief. One learns responsibility long before one can be allowed in a situation to exercise. Or would you permit a first year pre-med student to exercise responsibility by doing a little cutting during brain surgery?

He continued to say that "one does not put lunatics in charge of the asylum" and called this:

> the fool-for-a-master school of education. Every man his own professor. As a teacher, I cannot communicate to you the seriousness of a situation wherein students--however intelligent, sincere, and good hearted--are encouraged to learn on their own hook. They simply do not have the discrimination to make their way through the maze of erroneous books, for one thing.
>
> The basis of my criticism lies, of course, in the assumption, borne out by Natural Selection and other inexorable laws of psycho-biology, that immature members of a species are not to be permitted to control society. The Australian aborigines might be looked into here as an example of a group of human beings living on the very edge of survival; study how rigorous they make the tests for passage of a youth from childhood to adulthood. He is not permitted to jeopardize the existence of the group by taking over the hunting, for instance.

Of course, it is dangerous to assume that the type of learning appropriate for the aborigine would be appropriate for someone in a modern technological society. It is interesting that Carl Rogers (1967) also used the Australian aborigines as an example of information-transmission type education. He said that the aborigine "has survived by passing on every bit of knowledge and skill he has acquired about a relatively unchanging world and frowning upon or tabooing any new ways of meeting the relatively unchanging problems. This has been the description of American educational goals as well."

In reference to the rebellious, anti-establishment, or anti-authority students, our traditional professor said that "such people should be removed from the program immediately, or strangled, whichever is quicker."

In reference to the suggestion that instead of assigning reading, the instructor should structure the program to allow the student to seek information, he said, "what you are saying when you allow the dismissal of assigned reading is that you are willing to throw out the experience of other, better qualified people." This is not true at all, of course, as he would know if he understood Participative Education. The student is learning to make use of as many "better qualified people" as possible in his own quest for learning. The instructor is only one of many.

Participative Education assumes that students should be allowed to learn from their own mistakes. Our traditional professor said, "Yes, let us treat mistakes as learning experiences, by all means. If our first year med student cuts the heart out of a patient mistaking it for the appendix, we'll let him try again. What the hell!"

One criticism of current education stated previously is that it provides little opportunity for interaction between the students and the instructor (partly because of the large size of the classes) or among the students, except on an informal basis outside the classroom. Our traditional professor said, "Why should there be such interaction? I know students want this sort of relationship, but getting a dog might solve their problem with less trouble to the instructor."

We might be inclined to assume that our professor is attempting to be humorous, or that he is exaggerating for effect. Or we might choose to ignore what he says because we feel his statements are absurd. But it is quite probable that he is both sincere and serious, and that he represents the attitudes of a good many of his profession. It is little wonder, therefore, that students are rebelling.

We have a tendency to disregard the criticisms of the traditionalists, but if we hope to effect change in education, they will have to be taken into consideration. They quite possibly represent the opinions and assumptions of the majority of our educators. To understand the resistance we can expect, we should listen to our traditional professor, who said in response to the statement that in Traditional Education many

instructors maintain that students should be given a solid foundation in fundamental facts and principles before being allowed to solve problems on their own, and some students demand that they be given the facts and not be asked to seek out information on their own:

> You people ought to pay attention to these criticisms; they are valid. And don't insinuate disapproval by underlining "given" and "facts." Don't you understand that the whole complex of human knowledge is a process of accumulation of given facts, one scholar, perhaps, contributing one useful fact? Leave man to himself, without teaching, without books, and he will be an animal. For the love of God, take this seriously.

These opinions and criticisms are quoted because any change or attempted change in educational methodology in our schools and colleges will have to take into consideration the attitudes and assumptions of the teachers and instructors. We can expect that it will be quite difficult to establish meaningful dialogue with some. Their reactions to a suggested change as drastic as Participative Education will quite likely be more emotional than rational. If would be self-defeatig to try to convince such a person or to try to force him to use the new approach. This resistance is a crucial factor in any change process and will have to be considered and prepared for by any exponents of a new approach to education.

Summary and Conclusion

Participative Education is offered as an alternative to Traditional Education to better achieve the objectives and satisfy the needs of a rapidly changing world. The assumptions and objectives of Participative Education can probably best be summarized by selected quotes from Perceiving, Behaving, Becoming: A New Focus for Education (Association for Supervision and Curriculum Development, Arthur Combs, Ed., 1962):

> 1. Education must deal with subject matter, not as an end in itself, but as a means of helping children to achieve the intelligent imagination and creativity necessary to find adequate answers to the world's interestingly complex problems (p. 157).
>
> 2. If the public schools accept the responsibility for their effects upon the self, it is clear that the self must be recognized in the classroom. The effect of schooling on the child's self must be equally as important with the acquisition of subject matter (p. 101).

3. Teaching for creativity requires creative teaching. It calls for a facilitating environment and a restructuring of learning activities. It is not easy teaching, but makes new demands of every teacher and every resource. The price is high, but the development of adequate personalities who are creative and open to experience is the function of the school and the price must be met (p. 161).

4. The development of personal meanings for a rich store of information is a purpose of the schools. Both knowledge of abstract, verbal terms, which express concepts about the world, and knowledge of self and feelings are included in the information the adequate person has available. Each person selects, organizes, and interprets the sensations he receives in terms of his beliefs, values and needs. . . . More intelligent behavior results through the development of rich, extensive, and deeply personal meanings. These personal meanings about the world and people are derived as the individual becomes open to experience (p. 185).

5. The characteristics necessary for the production of adequate persons are also the characteristics which produce efficient learners. . . . Education can only be effective to the extent that it develops people with self concepts that result in intellectual exploration, not concepts of self that continually intrude and get in the way. . . . A positive view of self, openness to experience, identification with others, and integrity contribute to the development of extensive personal meanings. The interaction of these factors in large part determines what is learned and how well (p. 186).

6. For the most part, learning about self is a product of interaction with human beings. (Self) acceptance and openness are a function of the quality of the individual's experience with the significant people in his world (p. 119).

7. . . . adequate persons are responsible and trustworthy and . . . survival of our democratic society depends on an increasing number of responsible and trustworthy persons who have the capacity for identification with their fellow men. . . . Identification is learned from experience with others and the school should provide experiences which make this learning possible (p. 165, 166).

8. The feeling of identification is most likely to be found in schools which foster cooperative rather than competitive experiences. Identification is learned from experiences which bring people together rather than set them apart. Hence, identification is more likely to be learned

> from cooperative rather than competitive relationships (p. 166).
>
> 9. We are beginning to see learning as a problem of a total personality. We are beginning to understand that, unless behavior has changed, one has not really learned. It is becoming more and more clear that the key to effective behavioral change is an individual's personal discovery of meaning. It is values, beliefs and personal meanings which affect behavior most markedly. People without beliefs, values, and convictions cannot be counted on in a society whose very survival depends on active, responsible and trustworthy people (p. 199).

Although Participative Education is difficult to describe in a few pages, the following are some of its main characteristics:

1. It is student-centered rather than teacher-centered. The focus is on learning rather than on teaching. The concern in any activity is for the needs of the individual student, not the needs of the teacher.

2. The emphasis is on individuality and creativity rather than conformity. The concern is for individual development within the system, not conformity to the system.

3. The emphasis is on thinking and problem-solving, rather than on memorization and regurgitation. And in problem-solving, the focus is on real-life, open-ended problems rather than on "one right answer" exercises. Creative solutions to problems are valued over the "one right answer" or the answer preferred by the instructor.

4. The focus is on exploration and discovery rather than on memorization, on asking questions rather than on providing answers, on formulating and testing hypotheses rather than on seeking facts.

5. The student is expected to assume responsibility for his own learning. It is not the instructor or the system that decides what is best for each student and assumes the responsibility for making sure he gets it. The educational process is structured to allow the student to assume the responsibility for active participation in the learning/problem-solving/data-gathering processes.

6. The student learns to identify and make effective use of available resources to assist him in these processes. The focus is on learning to obtain information when needed, not on memorization of facts to pass an examination. Emphasis is more on the student seeking information than on the instructor transmitting information he feels the student should have. The focus is on the discovery and definition of concepts through the process of seeking information and solving meaningful problems. The

instructor does, however, help the student identify meaningful and relevant problems to solve, thereby creating a need for the information.

7. Students learn to work together in the solution of problems, and learn to work with others while doing so. Emphasis is on cooperation and effective team work rather than on competition.

8. Emphasis is more on involvement of students in establishing meaningful goals, than on goals established by the instructor. The student is involved in the identification of learning needs based on personal and meaningful objectives and on evaluation of his own progress, performance, learning, achievement, and understanding against these objectives. He is also involved in evaluation of his and other students' solutions to problems and evaluation of information he receives or data he collects.

9. The educational process is structured to help the student learn how to learn, develop the attitudes and skills for life-long, self-initiated learning, rather than to cover a specified amount of material in textbooks.

10. Ideally, courses of the type that require all students to cover a given amount of material in a given amount of time and the lock-step system would be eliminated. Grades would also be eliminated. Learning and performance objectives would be established, and the student would be allowed to move on to the next phase whenever he had achieved those objectives.

Participative Education thus attempts to involve the student in meaningful experiences, experiences relevant to his future life and occupation, and to provide him with the opportunity and a methodology for learning from this experience. The methodology itself prepares the student for continued learning on his own and results in much more individual growth than is found in Traditional Education. Students do not become dependent upon the instructor, but develop self-reliance, confidence in their own abilities, and, as a result, increased self-esteem. They leave school more mature, more sure of themselves, and equipped for life-long, continued learning.

We are confident that students who are educated in this way will be much better prepared for the future than would students who are being taught in the traditional, instructor-centered, subject-centered way. The process of participative, student-centered education more closely resembles the process of living, learning, and working in the real world. Fewer changes are required in attitude or approach when leaving school and entering the world of work.

In the process of Participative Education, students learn how to learn, to solve problems, and to work effectively with others. Students who were educated through such a process could not help but be better

prepared for the real world than are those who are subjected to the traditional approach to education. And the impact of such students on the world could not help but make it a better place to live.

Although a changeover to the new approach is difficult, the results in terms of student involvement, learning, and growth make it well worth the effort. A great many people have become disenchanted with traditional approaches to education, and many individuals are experimenting with new approaches and techniques. But their efforts are not being coordinated, evaluated, or documented and communicated to any extent. It is assumed, therefore, that the approach outlined herein would meet the needs of many teachers and educators who are searching for a better way, as well as meeting the needs of the most important person--the student. It could conceivably provide both impetus and direction to the revolution in education that seems to have been brewing for some time.

SELECTED BIBLIOGRAPHY

Adelman, Howard, and Lee, Dennis (eds.). The University Game. Toronto, Ontario: The House of Anansi, 1968.

Argyris, Chris. Integrating the Individual and the Organization. New York: Wiley, 1964.

Astin, Alexander W. Folklore of Selectivity. Saturday Review, December 20, 1969.

Axelrod, Joseph; Freedman, Mervin B.; Hatch, Winslow R.; Katz, Joseph; and Sanford, Nevitt. Search for Relevance: The Campus in Crisis. San Francisco: Jossey-Bass, 1969.

Batten, T. R. The Non-Directive Approach to Group and Community Work. London: Oxford University Press, 1967.

Bell, Daniel, and Kristol, Irving (eds.). Confrontation: The Student Rebellion and the Universities. New York: Basic Books, 1968.

Bennis, Warren G. Changing Organizations. San Francisco: McGraw-Hill, 1966.

Brown, George I. Human Teaching for Human Learning. McGraw-Hill, 1970. (in press)

Bruner, Jerome S. The Process of Education. Cambridge: Harvard University Press, 1966.

Butz, Otto (ed.) To Make a Difference. New York: Harper and Row, 1967.

Calvin, Allen D. Student Centered Instruction. Mimeo. Palo Alto, California: Behavioral Research Laboratories.

Chickering, Arthur W. Education and Identity. San Francisco: Jossey-Bass, 1969.

Combs, Arthur, Chairman, American Association for Supervision and Curriculum Development 1962 Yearbook Committee. Perceiving, Behaving, Becoming: A New Focus for Education. Washington, D. C.: The National Education Association, 1962.

Committee on the Student in Higher Education. The Student in Higher Education. New Haven, Conn.: The Hazen Foundation, 1968.

Crary, Ryland W. Humanizing the School: Curriculum Development and Theory. New York: Alfred A. Knopf, 1969.

Dewey, John. The School and Society. Chicago: University of Chicago Press, 1900.

Dewey, John. Democracy and Education. New York: Macmillan, 1916.

Dewey, John. Education Today. New York: G. P. Putnam's Sons, 1940.

Dobbins, Charles G., and Lee, Calvin B. T. (eds.). What Goals for Higher Education? Washington, D. C.: American Council on Education.

Dubin, Robert, and Taveggia, Thomas C. The Teaching-Learning Paradox: A Comparative Analysis of College Teaching Methods. Eugene, Oregon: Center for the Advanced Study of Educational Administration, University of Oregon, 1968.

Dusenberg, Robert (ed.). Toward the 21st Century in Higher Education. Corvallis, Oregon: Oregon State University Press, 1967.

Evans, Richard I., and Leppmann, Peter K. Resistance to Innovation in Higher Education. San Francisco: Jossey-Bass, 1967.

Feldman, Kenneth A., and Newcomb, Theodore M. The Impact of College on Students. San Francisco: Jossey-Bass, 1969.

Freedman, Mervin B. The College Experience. San Francisco: Jossey-Bass, 1967.

Fromm, Erich. The Sane Society. Greenwich, Conn.: Fawcett, 1955.

Gardner, John W. Excellence: Can We Be Equal and Excellent Too? New York: Harper & Row, 1962.

Gardner, John W. Self-Renewal: The Individual and the Innovative Society. New York: Harper & Row, 1963.

Glasser, William, M. D. Schools Without Failure. New York: Harper & Row, 1969.

Goheen, Robert F. The Human Nature of a University. Princeton, N.J.: Princeton University Press, 1969.

Goodman, Paul. Compulsory Mis-Education and the Community of Scholars. New York: Vintage Books, 1964.

Goulet, Richard R. (ed.). Educational Change: The Reality and the Promise. New York: Citation Press, 1968.

Gross, Ronald, and Murphy, Judith. The Revolution in the Schools. New York: Harcourt, Brace and World, 1964.

Harris, L. Dale; Wight, Albert R.; and Tucker, Michael F. The Prediction, Identification, and Development of Creative Talent Among Undergraduate Engineering Students. The University of Utah College of Engineering, Salt Lake City, Utah, 1969. (Sponsored by the ESSO Foundation).

Harrison, Roger, and Hopkins, Richard L. The Design of Cross-Cultural Training: An Alternative to the University Model. Journal of Applied Behavioral Science, Vol. 3, No. 4, 1967, p. 431-460.

Hart, Leslie A. The Classroom Disaster. New York: Teachers College Press, Columbia University, 1969.

Healy, Timothy S. Will Everyman Destroy the University? Saturday Review, December 20, 1969.

Heath, Douglas H. Growing Up In College. San Francisco: Jossey-Bass, 1968.

Hefferlin, J. B. Lon. Dynamics of Academic Reform. San Francisco: Jossey Bass, 1969.

Heilbroner, Robert L. Priorities for the Seventies. Saturday Review, January 3, 1970.

Heist, Paul (ed.). The Creative College Student. San Francisco: Jossey-Bass, 1968.

Holt, John C. How Children Fail. New York: Pitman, 1964.

Holt, John C. How Children Learn. New York: Pitman, 1967.

Holt, John C. Is School Doing Your Child More Harm Than Good? Family Circle. September, 1969.

Hook, Sidney. Academic Freedom and Academic Anarchy. New York: Cowles Book Co., 1969.

James, W. Pragmatism. New York: Longmons, Green, 1914.

Katz, Joseph, and Associates. No Time for Youth: Growth and Constraint in College Students. San Francisco: Jossey-Bass, 1968.

Keppel, Francis. The Necessary Revolution in American Education. New York: Harper & Row, 1966.

Kozol, Jonathan. Death at an Early Age. New York: Bantam Books, 1968.

Laing, R. D. The Divided Self. Baltimore: Penguin Books, 1965.

Lean, Arthur E. And Merely Teach. Carbondale, Ill.: Southern Illinois University Press, 1968.

Leonard, George B. Education and Ecstasy. New York: The Delacorte Press, 1968

Likert, Rensis. New Patterns of Management. New York: McGraw Hill, 1961.

Likert, Rensis. The Human Organization: Its Management and Value. New York: McGraw-Hill, 1967.

Marshall, Max S. Teaching Without Grades. Corvallis, Oregon: Oregon State University Press, 1968.

Marshall, Sybil. Adventure in Creative Education. Oxford, England: Pergamon Press, 1968.

Martin, Warren Bryan. Alternative to Irrelevance: A Strategy for Reform in Higher Education. Nashville: Abingdon Press, 1968.

Martin, Warren Bryan. Conformity: Standards and Change in Higher Education. San Francisco: Jossey-Bass, 1969.

Maslow, Abraham H. Toward a Psychology of Being. New York: D. Van Nostrand Co., 1962.

Mayhew, Lewis B. Colleges Today and Tomorrow. San Francisco: Jossey-Bass, 1969.

McGregor, Douglas M. The Human Side of Enterprise. New York: McGraw-Hill, 1960.

Meyerson, Martin. New Paths to New Destinations. Saturday Review, January 10, 1970.

Mintner, John W. (ed.). The Individual and the System: Personalizing Higher Education. Boulder, Colorado: Western Interstate Commission for Higher Education, 1968.

Mogar, Robert E. Toward a Psychological Theory of Education. Journal of Humanistic Psychology, Vol. IX, No. 1, Spring, 1969.

Powell, Robert S. Jr. Participation is Learning. Saturday Review, January 10, 1970.

Riddles, Will. The Unquiet Revolution. Improving College and University Teaching, Vol. XVII, No. 3, Summer 1969, p. 155-156.

Rogers, Carl R. The Facilitation of Significant Learning. In Lawrence Siegel (ed.). Instruction: Some Contemporary Viewpoints.

Rogers, Carl R. Freedom to Learn. Columbus: Charles E. Merrill Publishing Co., 1969.

Rogers, Carl R. On Becoming a Person. Boston: Houghton Mifflin Co., 1961.

Runkel, Philip; Harrison, Roger; and Runkel, Margaret (eds.). The Changing College Classroom: Innovations in Teaching. San Francisco: Jossey-Bass, 1969.

Sampson, Edward E.; Korn, Harold A.; and Associates. Student Activism and Protest: Alternatives for Social Change. San Francisco: Jossey-Bass, 1969.

Sanford, Nevitt. Where Colleges Fail. San Francisco: Jossey-Bass, 1967.

Schaefer, Robert J. The School as a Center of Inquiry. New York: Harper and Row, 1967.

Schwab, Joseph J. College Curriculum and Student Protest. Chicago: University of Chicago Press, 1968.

Simpson, Ray H., and Serdman, Jerome M. Student Evaluation of Teaching and Learning. Washington, D. C.: The American Association of Colleges for Teacher Education, 1968.

Smith, G. Kerry (ed.). Agony and Promise: Current Issues in Higher Education 1969. San Francisco: Jossey-Bass, 1969.

Smith, G. Kerry (ed.). Stress and Campus Response: Current Issues in Higher Education 1968. San Francisco: Jossey-Bass, 1968.

Skinner, B. F. The Technology of Teaching. New York: Appleton-Century-Crofts, 1968.

Stern, G. G. Environments for Learning. In Nevitt Sanford (ed.). The American College. New York: Wiley & Sons, 1962, p. 690-730.

Stone, James C. Breakthrough in Teacher Education. San Francisco: Jossey-Bass, 1968.

Stone, James C. Teachers for the Disadvantaged. San Francisco: Jossey-Bass, 1969.

Torrance, E. Paul. Guiding Creative Talent. Englewood Cliffs, N.J.: Prentice-Hall, 1962.

-e-

Torrance, E. Paul. Education and Creativity. In C. W. Taylor (ed.). Creativity: Progress and Potential. New York: McGraw-Hill, 1964, p. 49-128.

Trent, James W., and Medsker, Leland L. Beyond High School: A Study of 10,000 High School Students. San Francisco: Jossey-Bass, 1968.

U. S. Department of Health, Education, and Welfare. Research and Development: Advances in Education. Washington, D. C.: U. S. Government Printing Office, 1968.

Westley, William A., and Epstein, Nathan B. The Silent Majority: Families of Emotionally Healthy College Students. San Francisco: Jossey-Bass, 1969.

Whitehead, Alfred North. The Aims of Education. New York: The Macmillan Co., 1929.

Wight, Albert R., and Casto, Glendon. Training and Assessment Manual for Peace Corps Experiential Laboratory. Estes Park, Colorado: Center for Research and Education, 1969. (Under Peace Corps Contract).

Wight, Albert R. and Hammons, Anne. Guidelines for Peace Corps Cross-Cultural Training. Estes Park, Colorado: Center for Research and Education, 1970 (Under Peace Corps Contract).